Session XII Agenda

I. Status Update & Stakeholder Feedback – **30 minutes**
   - DESC IRP Process & Schedule Update
   - Review of Stakeholder Homework From Session XI

II. IRA – Energy Communities – **10 Minutes**

III. IIJA & Electrification – **40 Minutes**

IV. Gas Supply Planning – **20 minutes**

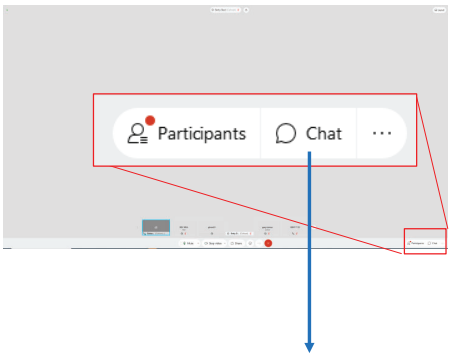
V. 2022 TIA Results and 2023 TIA – **40 minutes**

V. Planning for Session XI and Next Steps – **10 minutes**
   - Session XII Homework
   - Stakeholder Questions

Q&A

- Microphones will be muted during presentations; we will open them when addressing questions at end of each section
- During presentations, questions can be submitted via the chat function
  - Only questions submitted in writing will be answered during live Working Group Sessions
- Each questioner will be allowed one follow-up question before they yield the floor to the next questioner
  - Please don't ask multiple questions in one question
  - If time permits and all questioners are answered, we will come back for additional questions
- All Q&As will be responded to in writing and placed on the web page:
  - https://www.DESC-IRP-Stakeholder-Group.com

Look for the chat function in the bottom right hand corner of the WebEx screen



Please type questions into the group chat

DESC IRP Stakeholder Advisory Group Session XII

I. Status Update & Stakeholder Feedback

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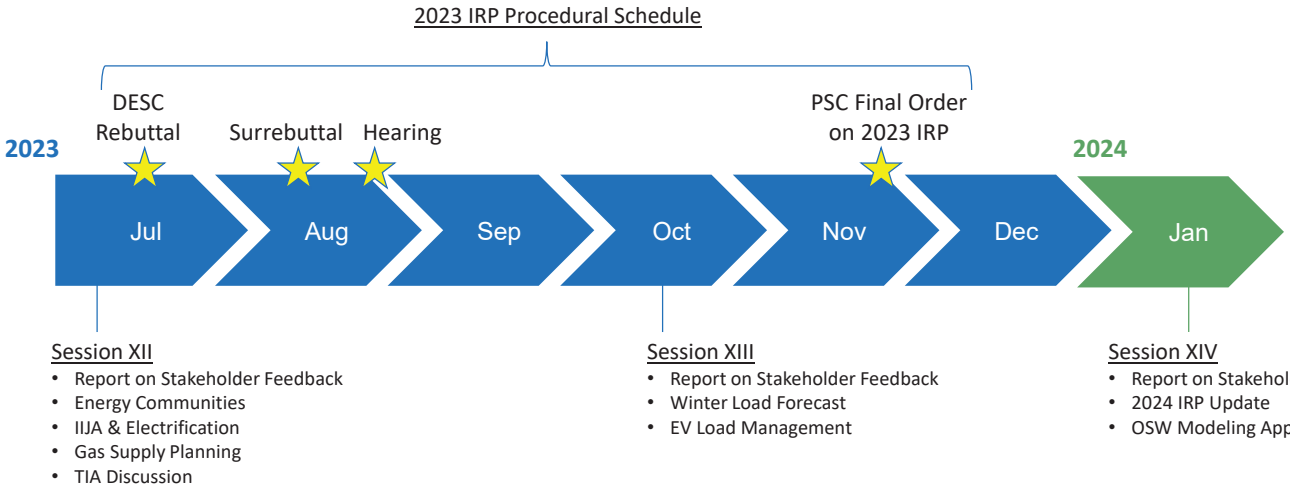
Status Update & Stakeholder Feedback

- DESC IRP Process & Schedule Update
- Review of Stakeholder Homework From Session XI
- *Discussion*

DESC IRP Process & Schedule Update



Session XI Homework

General Feedback

1. What topics should DESC add to the agenda at Session XII or as part of a future Stakeholder Session?

IRA & IIJA

2. What specific changes/modifications/additions do stakeholders recommend to future DESC IRPs regarding modeling of the IRA/IIJA?

Gas Supply Planning

3. What specific topics & questions should DESC aim to discuss with stakeholders regarding gas supply planning associated with new gas resources in future IRPs?

2022 TIA Results

4. Are there any specific questions pertaining to the 2022 TIA Results that DESC should cover during Session XII?

1. General Feedback

Stakeholder Comments	Response / Action Taken
How does DESC plan to comply with the 2023 Proposed ELG Rule (88 Fed. Reg. 18824) for its remaining coal fleet and will it be included in any updated modeling or IRP updates? Request a detailed discussion regarding DESC's plans to comply with the Supplemental Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category, 88 Fed. Reg. 18824 (Mar. 29, 2023) (the "Proposed 2023 ELG Rule"). If DESC has not considered the costs of complying with the 2023 Proposed ELG Rule, will DESC wait until the Proposed 2023 ELG Rule is finalized to calculate potential costs and establish a timeline for compliance?	This is a proposed rulemaking activity; as such, the Company has not yet determined the scope and potential costs for any retrofits associated with the proposed rule to its facilities.

1. General Feedback

Stakeholder Comments	Response / Action Taken
Does the Company plan on making the ELG upgrades on Wateree?	That ultimate decision has not been made. As indicated in the 2023 IRP, DESC is committed to replacing Wateree by the end of 2028 if it can be done while maintaining system reliability. Progress in procuring and siting replacement capacity will be a key driver in deciding whether to pursue ELG compliance for Wateree. DESC has until December 31, 2025, to either commit to retire Wateree or continue making the required ELG upgrades. The Company does not yet have a definitive timeline for such a Request for Proposals ("RFP"), as any such RFP is pending constructive conclusion of the on-going Urquhart Replacements All Sources RFP ("Urquhart RFP") as governed by Commission Order No. 2022-27. Given the requirement to either comply with ELG rules or retire Wateree by December 31, 2028, the Company desires to move forward expeditiously with an RFP in order to ensure replacement resources are online and any needed transmission upgrades are completed to provide grid reliability.

1. General Feedback

Stakeholder Comments	Response / Action Taken
Is the Company leaning towards a CT or a battery at this point, and how will the decision be made? Will there be an RFP?	The 2023 IRP shows that under current assumptions the Wateree Battery Build Plan is the most economical for customers. DESC is planning to conduct competitive procurement activities for a Wateree replacement and to base its final decision on those results.
If the Company chooses to replace the existing capacity at Wateree with a CT, is there available natural gas supply?	A replacement CT would be located at Urquhart and/or Bushy Park and existing natural gas infrastructure would be utilized.

1. General Feedback

Stakeholder Comments	Response / Action Taken
The fixed Coal O&M cost assumption multiplier of 3.47 and continued escalation beyond 2026 is very large. Has the company evaluated how much that derives the decision to retire the units?	The 3.47 multiplier only applies to ongoing capital not all FOM. The multiplier is used to convert the revenue requirements on new capital to equivalent annual fixed cost because PLEXOS doesn't do that calculation.

2. IRA & IIJA

Stakeholder Comments	Response / Action Taken
Stakeholders believe that it is important to reflect the demand-side measures that will be incentivized by the IRA and which, to our understanding, are not currently captured in DESC's load forecast.	DESC's load forecast is informed by the 2023 DSM Potential Study. Demand side programs are currently being designed for implementation by the EEAG.
Now that DOE has published the locations of areas where eligible generators could receive the energy community adder, it is important that DESC evaluate new solar and battery storage resources in those eligible areas.	DESC intends to discuss Energy Communities during Session XII.

2. IRA & IIJA

Stakeholders reviewed DESC's EV Adoption Study that was submitted with the 2023 IRP, and respectfully requests that DESC considers the following questions related to **IIJA and transportation electrification**:

Stakeholder Comments	Response / Action Taken
To what extent did Guidehouse consider policy interventions to avoid EV charging that is coincident with peak loads?	Guidehouse modeled EV contribution to peak through the simulation of load profiles based on the vehicle class and powertrain with the electric vehicle supply equipment ("EVSE") use-case. Guidehouse modeled passive managed charging via Time-of-Use enrollment in relevant tariffs, for example Rate 5 Time-of-Use Residential Service. For commercial, Rate 16 Time-of-Use General Service, and Rate 21 General Service Time-of-Use Service. Thus, coincident peak EV charging was avoided through the direct on-peak price signal in existing tariffs. Other programs, such as direct load control, or V2X were not considered

2. IRA & IIJA

Stakeholders reviewed DESC's EV Adoption Study that was submitted with the 2023 IRP, and respectfully requests that DESC considers the following questions related to **IIJA and transportation electrification**:

Stakeholder Comments	Response / Action Taken
To what extent did Guidehouse consider having DESC employ basic, proven policy interventions such as time of use ("TOU") rates to shift EV charging times off peak and to avoid otherwise unnecessary grid investments?	Guidehouse modeled the employment of TOU rates to shift EV charging times off peak. TOU participation (opt-in) in TOU rates varied by segment as follows: • BAU Scenario 10% residential TOU enrollment • Managed Scenario residential 50% TOU enrollment • BAU Scenario 5% commercial TOU enrollment • Managed Scenario commercial 75% TOU enrollment

2. IRA & IIJA

Stakeholders reviewed DESC's EV Adoption Study that was submitted with the 2023 IRP, and respectfully requests that DESC considers the following questions related to **IIJA and transportation electrification**:

Stakeholder Comments	Response / Action Taken
To what extent did Guidehouse consider having DESC develop “vehicle-to-grid” or “V2G” rate structures that can allow school districts to leverage their electric school bus fleets to provide energy storage as a grid benefit and in exchange defray the costs of procuring or powering their bus fleets?	While Guidehouse did model the sales, registrations, and grid impacts of electric busses as well as other medium and heavy-duty vehicle classes, this study did not consider the development or deployment of V2G rate structures, incentives, or bidirectional EVSE. V2G is a promising technology that may offer benefits to both customers and grid operators in the future, and will require technology, standards, and incentive coordination.

2. IRA & IIJA

Stakeholders reviewed DESC's EV Adoption Study that was submitted with the 2023 IRP, and respectfully requests that DESC considers the following questions related to **IIJA and transportation electrification**:

Stakeholder Comments	Response / Action Taken
More generally, what role will DESC play in building out charging infrastructure, particularly where there may be market failures or where it is in the public's interest to do so?	To estimate EVSE build-out, Guidehouse uses a market equilibrium model where the demand for EVSE is assumed to be met over the long term by EVSE providers without individual attribution. This means that the model assumes that market failures will be addressed over time, though no individual actor's participation is modeled explicitly. The model does consider growth in infrastructure due to NEVI program funding over the short-term. DESC can serve the public interest and play a critical role in serving unmet demand for EVSE particularly in rural, underserved, or poorly connected areas through the development and operation of EVSE. In general, DESC believes EV charging equipment should be deployed to serve current and planned charging demand, to optimize network connectivity and promote universal access to EV chargers.

2. IRA & IIJA

Stakeholder Comments	Response / Action Taken
How will DESC support applicants of the different IIJA funding opportunities? In particular, how will DESC support applicants and recipients of EPA's Clean School Bus Program and DOT's Charging and Fueling Infrastructure Discretionary Grant Program?	An update on IIJA and transportation electrification will be covered during Session XII.
What role will DESC play in securing and using IIJA funds for medium and heavy duty public fleet electrification?	An update on IIJA and transportation electrification will be covered during Session XII.

3. Gas Supply Planning

Stakeholder Comments	Response / Action Taken
Stakeholders would like to understand the following regarding gas supply planning: 1. How would DESC characterize the level of reliability of supply enabled by these upgrades? 2. What are locations of the upgrades? 3. What issues are they intended to fix? 4. What is the projected timelines for the upgrades? 5. What do the upgrades depend on, e.g., regulatory approvals, other construction activities, etc.? 6. To what degree are the specific upgrades necessary for the provision of electric service vs. enabling economic development?	An update on natural gas supply planning will be covered during Session XII.

3. Gas Supply Planning

Stakeholder Comments	Response / Action Taken
Request a discussion on gas supply constraints for the Williams Replacement Capacity.	An update on natural gas supply planning will be covered during Session XII.

4. 2022 TIA Results

Stakeholder Comments	Response / Action Taken
How if, at all, have stakeholder concerns about past TIAs been addressed—particularly those in our comments on the 7th workshop, but also those raised in our comments on the 6th workshop and in comments by Sierra Club on Phase 2 of the TIA?	DESC aims to incorporate TIA suggestions from stakeholders when able and technically feasible. Examples of how stakeholder suggestions have influenced analysis include solar and battery replacement for Wateree (Case 1 of the 2022 TIA) and additional battery sensitivities for the Williams replacement (Case 5A, 5B, and 5C of the 2022 TIA). DESC provided rationale for not including specific stakeholder suggestions on pasts TIAs in the 2022 Coal Plants Retirement Study and DESC's reply to intervenor comments in Docket 2022-9-E. Details of the 2022 TIA will be discussed during Session XII.

4. 2022 TIA Results

Stakeholder Comments	Response / Action Taken
Stakeholders would appreciate a discussion on the transmission constraints into Charleston and a discussion on how DESC may better reflect those constraints in PLEXOS.	Details of the 2022 TIA Results will be discussed during Session XII. DESC builds and operates its generation and transmission system as a single, integrated system. DESC does not segment its system to model separate costs as suggested by stakeholders.

4. 2022 TIA Results

Stakeholder Comments	Response / Action Taken
If the Company chooses to replace the existing capacity [at Wateree] with a CT, what are the transmission costs associated with a CT?	The transmission costs associated with a CT will be discussed during Session XII. The recently completed 2022 TIA Supplemental Study – Wateree Retirement Modified Case 2 Transmission Impact Analysis Report addresses this question.
What are the TIA constraints for the Williams replacement capacity?	The 2022 TIA will be discussed during Session XII. DESC Transmission Planning will be available to respond to specific questions.

Discussion - Please “Raise Hand” in the Chat

DESC IRP Stakeholder Advisory Group Session XII

II. IRA – Energy Communities

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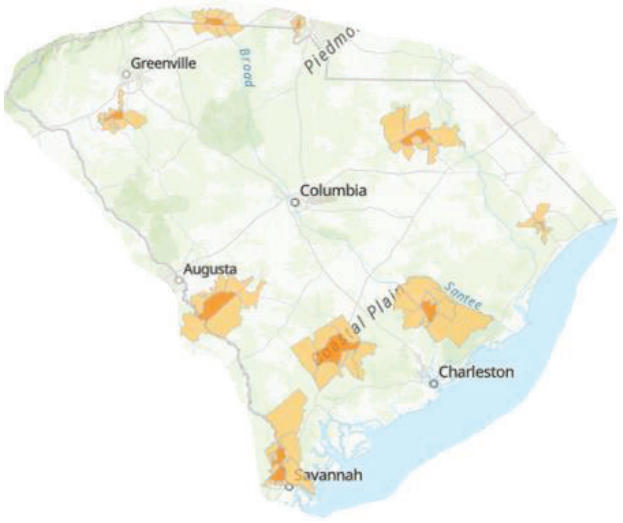
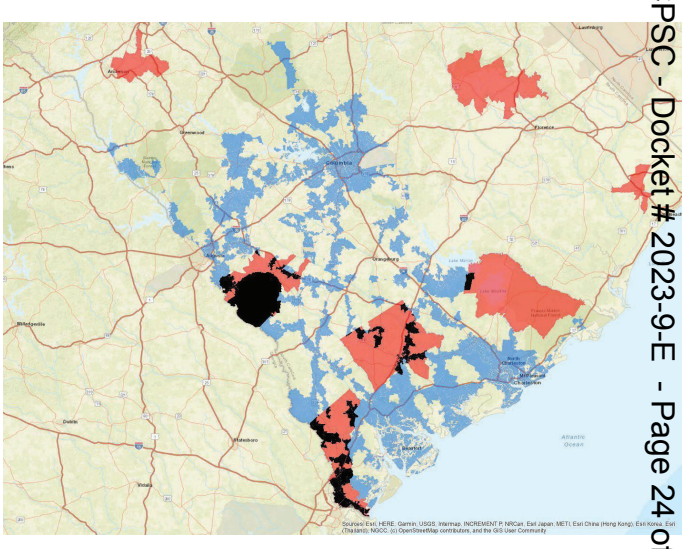
IRA – Energy Communities

Energy Communities



Energy Communities and DESC Service Territory



Discussion - Please “Raise Hand” in the Chat

DESC IRP Stakeholder Advisory Group Session XII

III. IIJA & Electrification

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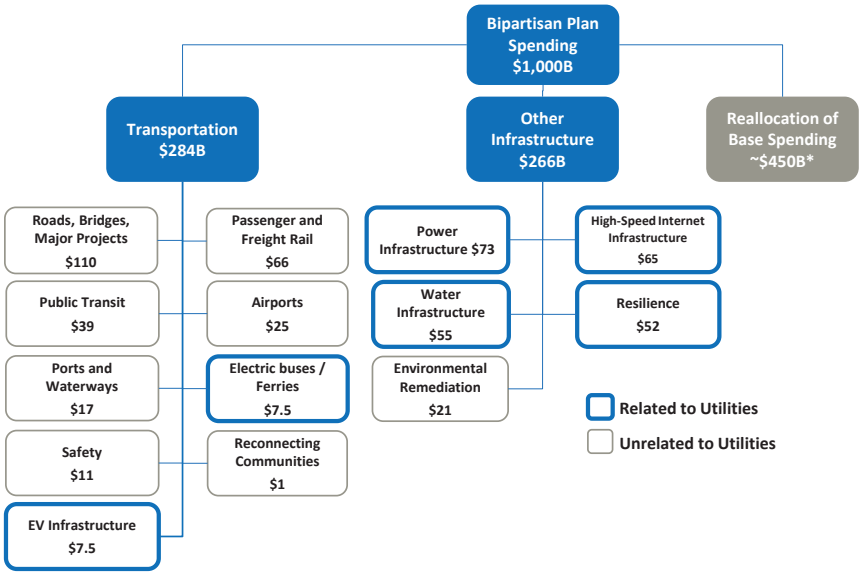
IIJA and Electrification

- IIJA Update
- Electrification Update
- Q&A

Infrastructure Investment and Jobs Act | Snapshot

The IIJA will invest $1T (and $550B in new funding) across industries such as Transportation, Utilities, Energy, Telecom, Automotive and others, spread across a 5-year period.

Federal Spending included within the IIJA

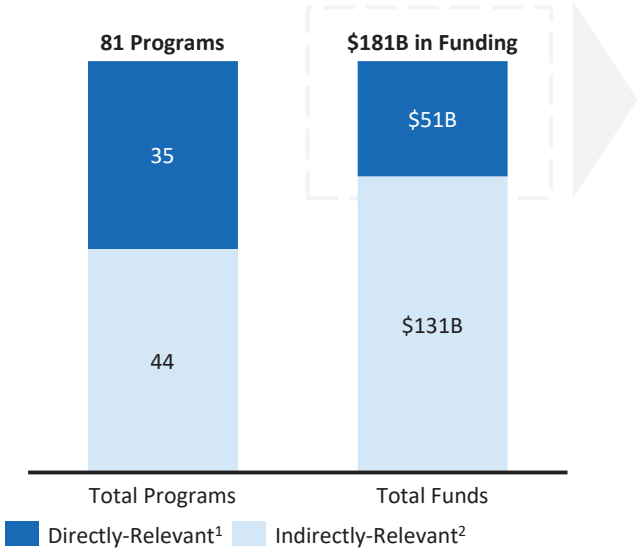


Source: White House

IIJA Electric Industry-Relevant Programs and Funding

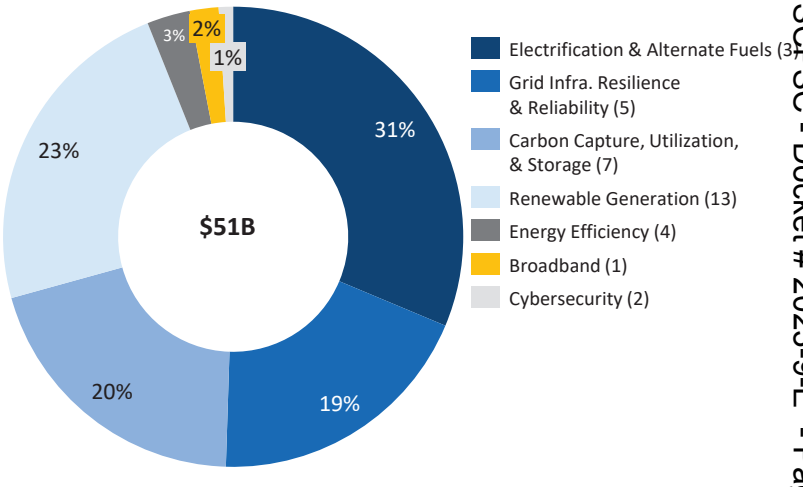
Electric Industry-Relevant IIJA Funding & Programs

# of programs, funding



Electric Industry Direct IIJA Funding by Category

% of total electric company-direct funds of $51B, (35 IIJA grant programs)



[1]Electric industry-direct funding are programs in which electric companies are primary applicants to electric company-relevant investments (e.g., smart grid investments, advanced electric conductors)
[2]Electric industry-indirect funding are programs in which electric companies are secondary applicants (e.g., partner, sub-awardee) for relevant investments to electric companies and the broader power industry (e.g., battery manufacturing)

IIJA Portfolio Status

Direct Applications

Project Milestones	South Carolina Optimization for Resilient Energy (SCORE)	Lowcountry Area Reliability and Capacity Improvement (LARCI)	Fairfield Increased Reliability for Solar Technology (FIRST)	Parr Design Flow – Increased Hydraulic Capacity (PDF-IHC)	Increased Oxygen Concentration in River via Saluda Turbine Aerating Runner (ICOR STAR)	Neal Shoals Increasing Capacity and Efficiency (NICE SC)
	40101(c)	40103(c)	40333	40333	40333	40333
Grant Request	$66M[1]	$10M	$5M[3]	$5M[3]	$5M	$5M
Number of Awards	10[2]	4 to 8	~110	~110	~110	~110
FOA Issued	11/18/22	3/1/23	5/8/23	5/8/23	5/8/23	5/8/23
Concept Paper/Letter of Intent Due	12/16/22 Encouraged	4/18/23 Discouraged	6/22/23	6/22/23	6/22/23	6/22/23
Application Due	4/6/23	6/28/23	10/6/23	10/6/23	10/6/23	10/6/23
Grant Award Selection	Fall 2023	N/A	TBA	TBA	TBA	TBA

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[1] Max award size of $100M; Awardees must provide a minimum 100% federal funding match; Award cannot be more than the applicant's total resilience investments over the past 3 years.
[2] Approximately 3 awards will be made to small utilities (i.e., ~30% funding)
[3] Only one project will be awarded, the BU is deciding which project is most competitive for a single application

Dominion Energy South Carolina Transportation Roadmap

Our Priorities

Ensure Ease of Adoption
We'll act as a catalyst to decarbonize transportation through education, engagement, policy, and customer solutions.

Provide Universal Access
We'll ensure equitable access to electric infrastructure and clean transportation for all customers and communities we serve.

Support Demand Growth
We'll support the growth of transportation electrification efforts that benefit all stakeholders and the environment.

What We Are Doing Now

Provide Infrastructure Service & Support for Rapid Deployment of DCFC for DESC Customers

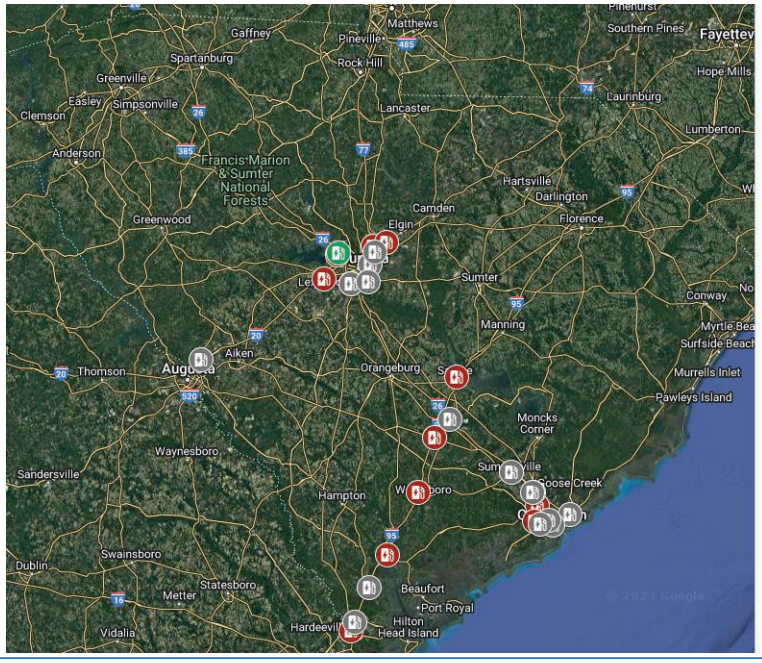
DESC Served High Speed Fast Chargers
(150 KW+)

<u>Active</u>

15 Stations
144 Ports
(136 Tesla, 8 Electrify America)

<u>In Design/ Construction</u>

12 Stations
~130+ Ports
(Tesla, EV GO)



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What We Are Doing Now

Provide Infrastructure Service, Support and Education for Customers

Electric School Buses

Grants: 165 buses

Rural/Underserved Areas targeted first by IIJA

Power Output Range:

Level 3: 60kw max

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Heavy Duty (Transit)

Charleston Area Rapid Transit Authority (CARTA)

In Service

26 Proterra buses

7 New Flyer buses

Current total: 33 buses

Power Output Range:

Up to 125 KW per port (power sharing)

3 MW Capacity (w/ ability to expand)

Columbia Comet

2-new flyer buses ordered

1-180 kw charger ordered

Due in by the end of 2023

L C R T | Lowcountry Rapid Transit

EV Charging on Your Site with On-Bill Financing

Site-Host Owned Infrastructure and Electric Vehicle Supply Equipment (EVSE)

- Site-Host selects desired EVSE + network service from a menu of options
  - DESC finances the project with monthly on-bill financing
- Site-Host pays a monthly **separately metered*** energy charge (**Rate 16 Time Of Use**)*
- Site-Host pays a flat monthly rate for DESC operations, maintenance, and network services
  - Network Services allow Site-Host to set pricing* and receive revenue from EV Drivers

**DESC does not set Charging Fees at individual stations.*

1st Installation (7-7-23)

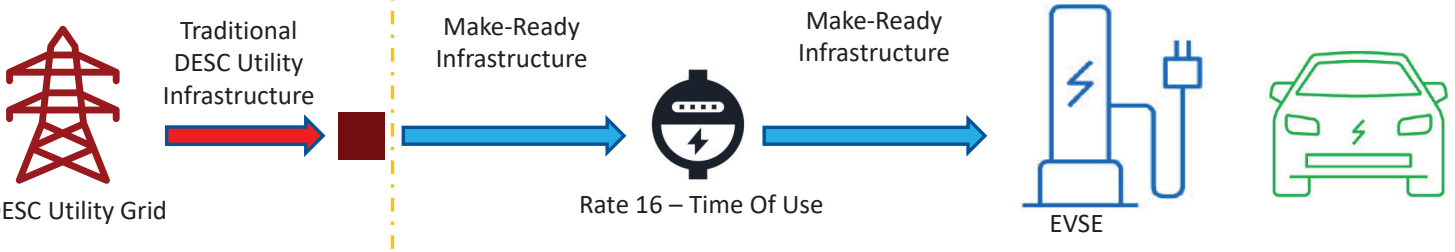
Site-Host receives Charging Fee Revenue

Only Site-Host Sets Charging Fee
EV Driver Pays with App/Card
DESC ensures EV stations are working

DESC On-Bill Finance Charging program features:

- Turn-Key Solution including Project Financing . Design . Install . Operate . Maintain
- 10-year (financing + O&M) term

--No or Low upfront capital required for qualifying Site Hosts



Traditional

Site-Host Owned → Financed and Maintained by Dominion Energy

*** TOU is passive managed charging and separate meter allows for future DSM/DR programs**

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DESC IRP Stakeholder Advisory Group Session XII

IV. Gas Supply Planning

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Gas Supply Planning

- Gas Supply Planning Update
- Q&A

Gas Supply Planning

- DESC & Santee Cooper are evaluating a Joint Project
  - Joint Gas Supply RFP has been issued/ Transco Open Season announcement
  - Canadys is the preferred site
- Mountain Valley Pipeline ("MVP") Update
  - DESC (Electric) has contracted for 62,500 Dts of capacity MVP Capacity
  - Feb. 28, 2023- U.S. Fish & Wildlife Service issued a new Biological Opinion & Incidental Take Statement
  - May 15, 2023- U.S. Forest Service issued a record of decision
  - June 20, 2023- Bureau of Land Management issued right-of-way grant, authorizing MVP to cross the Jefferson National Forest
  - June 3, 2023- Fiscal Responsibility Act signed into law
    - Section 324 of the Act ratified and approved all authorizations issued pursuant to Federal law necessary for the completion of MVP
  - June 23, 2023- U.S. Army Corps of Engineers issued an individual permit for MVP, authorizing all remaining open-cut waterbody crossings
  - June 28, 2023- FERC issued an order allowing MVP to proceed with all construction activities
  - MVP continues to state that the project will be completed by the end of 2023
- Q&A

DESC IRP Stakeholder Advisory Group Session XII

V. 2022 TIA Overview and 2023 TIA

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2022 TIA Results and 2023 TIA

- 2022 TIA Overview
- 2022 Supplemental TIA Case Overview
- 2023 TIA Status
- Q&A

2022 TIA Summary

- Six cases studied
  - Three focused on Wateree retirement by end of 2028
  - Three focused on Williams retirement by end of 2030
- Studies used previous analysis performed with Santee Cooper to incorporate Winyah retirement scenarios
- Best- and worst-case results provided in report
- Cases 4 - 6 assumed Case 2 as the replacement scenario for Wateree

2022 TIA Results

Case Number	Case Description	Best-Case Upgrades		Worst-Case Upgrades	
		Cost ($)	Time (Months)	Cost ($)	Time (Months)
1	• 375 MW / 1,500 MWh 4-hour BESS at Wateree • 150 MW AC PV solar generator at Wateree	18,175,000	30	253,634,636	72
2	Aeroderivative simple cycle CTs totaling 351 MW at Urquhart	180,553,000	60	288,810,636	72
3	PPAs set up for off-system energy, both for 175MW, one from DEC/DEP, one from SOCO for 2029 and 2030	126,432,636	72	307,373,436	96

2022 TIA Results

Case Number	Case Description	Best-Case Upgrades		Worst-Case Upgrades	
		Cost ($)	Time (Months)	Cost ($)	Time (Months)
4a	• Heavy-duty frame simple cycle CTs totaling 523 MW at Canadys • Aeroderivative CTs totaling 234 MW at Canadys	331,534,436	72	331,534,436	72
4b	• heavy-duty frame simple cycle CTs totaling 523 MW at Canadys • Aeroderivative CTs totaling 234 MW at Williams	318,366,436	72	331,624,436	72

2022 TIA Results

Case Number	Case Description	Best-Case Upgrades		Worst-Case Upgrades	
		Cost ($)	Time (Months)	Cost ($)	Time (Months)
5a	• Heavy-duty frame simple cycle CTs totaling 523 MW at Canadys • Aeroderivative CTs totaling 234 MW at Canadys • 100 MW / 400 MWh BESS at Williams	331,534,436	72	331,534,436	72
5b	• Heavy-duty frame simple cycle CTs totaling 523 MW at Canadys • Aeroderivative CTs totaling 234 MW at Canadys • 200 MW / 800 MWh BESS at Williams	210,108,800	54	331,534,436	72
5c	• Heavy-duty frame simple cycle CTs totaling 523 MW at Canadys • Aeroderivative CTs totaling 234 MW at Canadys • 300 MW / 1200 MWh BESS at Williams	210,108,800	54	331,534,436	72

2022 TIA Results

Case Number	Case Description	Best-Case Upgrades		Worst-Case Upgrades	
		Cost ($)	Time (Months)	Cost ($)	Time (Months)
6	• Heavy-duty frame simple cycle CTs totaling 523 MW at Canadys • Aeroderivative CTs totaling 234 MW at Canadys • Convert Williams to synchronous condenser (-250 – 350 MVar)	331,534,436	72	331,624,436	72

2022 Supplemental TIA Case Summary

- One case studied which focused only on Wateree retirement by end of 2028
- Replacement resources were:
  - Large frame simple-cycle CT with nameplate rating of 212.5 MW-AC at Urquhart
  - Aeroderivative simple-cycle CT with nameplate rating of 65.4 MW-AC at Bushy Park
  - Standalone BESS with a nameplate rating of 100 MW-AC at Wateree

2022 Supplemental TIA Case Results

Case Number	Case Description	Best-Case Upgrades		Worst-Case Upgrades	
		Cost ($)	Time (Months)	Cost ($)	Time (Months)
	• Large frame simple-cycle CT with nameplate rating of 212.5 MW-AC at Urquhart • Aeroderivative simple-cycle CT with nameplate rating of 65.4 MW-AC at Bushy Park • Standalone BESS with a nameplate rating of 100 MW-AC at Wateree	101,495,000	42	101,495,000	42

2023 TIA Summary

- Two cases focused on Williams and Winyah plant retirements by end of 2030
- Studies will be conducted jointly with Santee Cooper (results from previous Winyah retirement studies will not be used for Santee Cooper)
- Wateree replacement assumed:
  - Standalone BESS with a nameplate rating of 100 MW-AC at Wateree
  - Large frame simple-cycle CT with nameplate rating of 262 MW-AC at Urquhart
- Williams and Winyah replacement resource located at Canadys
  - Case 1: Combined-cycle plant with nameplate rating of 1300 MW-AC (650 MW DESC share)
  - Case 2: Combined-cycle plant with nameplate rating of 1800 MW-AC (900 MW DESC share)

2023 TIA Status

- Studies underway
- Base case generation and transmission assumptions updated by both companies
- Initial power flow simulations done
- Initial projects to remedy transmission constraints being evaluated
- Q3 target completion date

Discussion - Please “Raise Hand” in the Chat

DESC IRP Stakeholder Advisory Group Session XII

V. Plans for Session XIII and Next Steps

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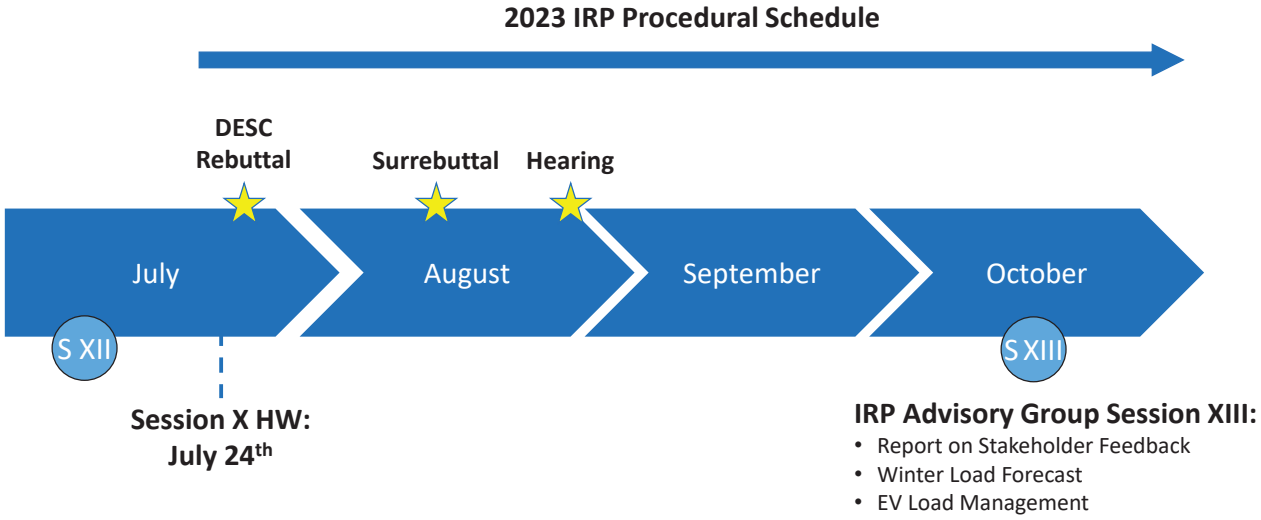
Plans for Session XIII and Next Steps

- Planning for Session XIII
- Session XII Homework
- *Discussion*

Planning for Session XIII



Session XII Homework

General Feedback

1. What topics should DESC add to the agenda at Session XIII or as part of a future Stakeholder Session?

Winter Load Forecast

2. What aspects of the winter load forecast should DESC cover during Session XIII?

EV Load Management

3. What topics should DESC further explore with stakeholders regarding EV load management? Please include specific examples, case studies, and best practices that could be used in future IRPs.

Request HW replies by July 24, 2023

Discussion - Please “Raise Hand” in the Chat

Stakeholder Website Overview

Supplemental materials and QA support documents

Registered users can submit on-topic Questions to DESC

Published QA can be viewed by public

Stakeholder Meeting Materials posted here before or shortly after Working Group Sessions

https://www.DESC-IRP-Stakeholder-Group.com

Email DESC-IRP-Group@crai.com with questions about the website or if you have content to share with the Stakeholder Group